FIG 1

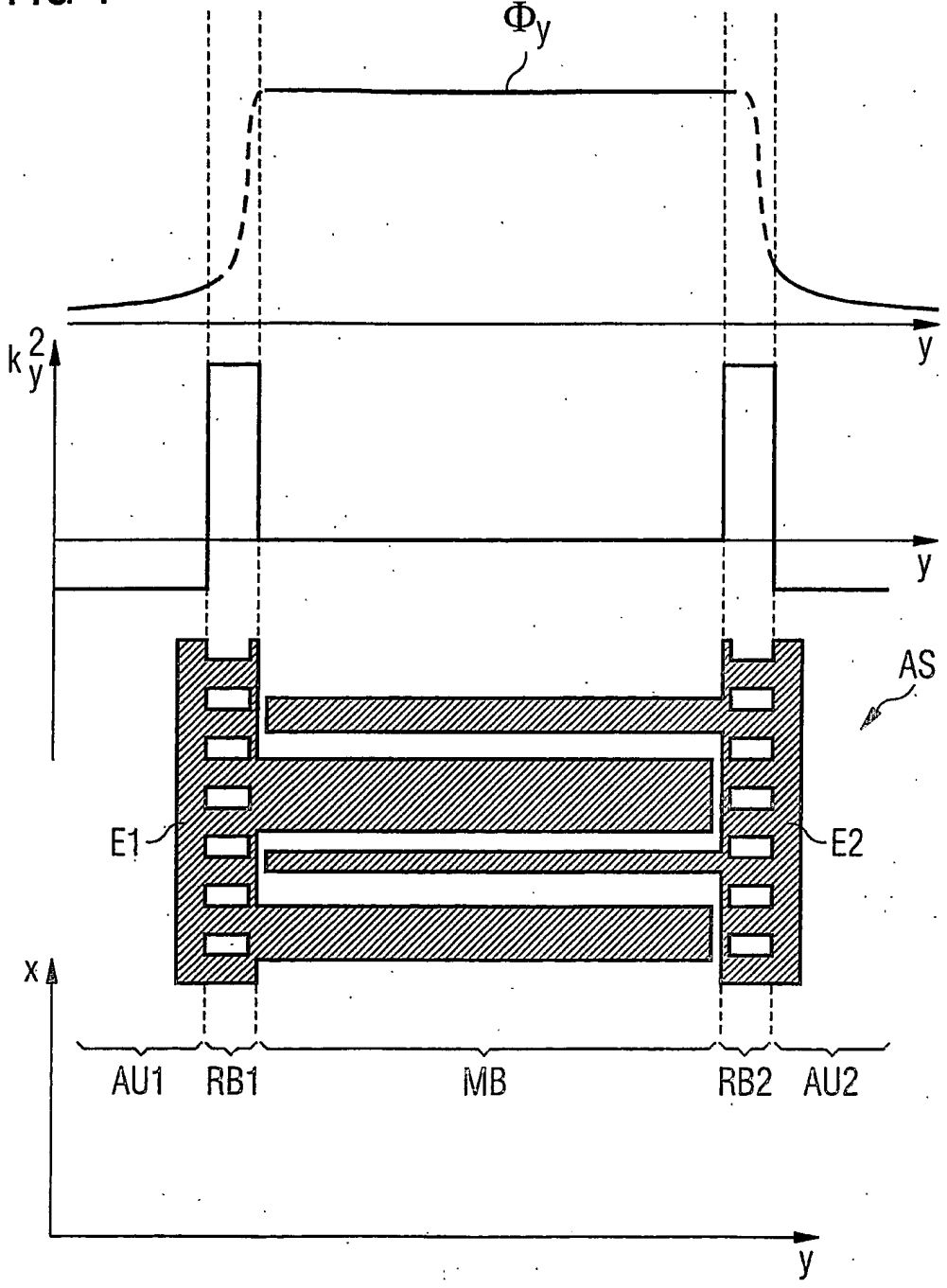


FIG 1a

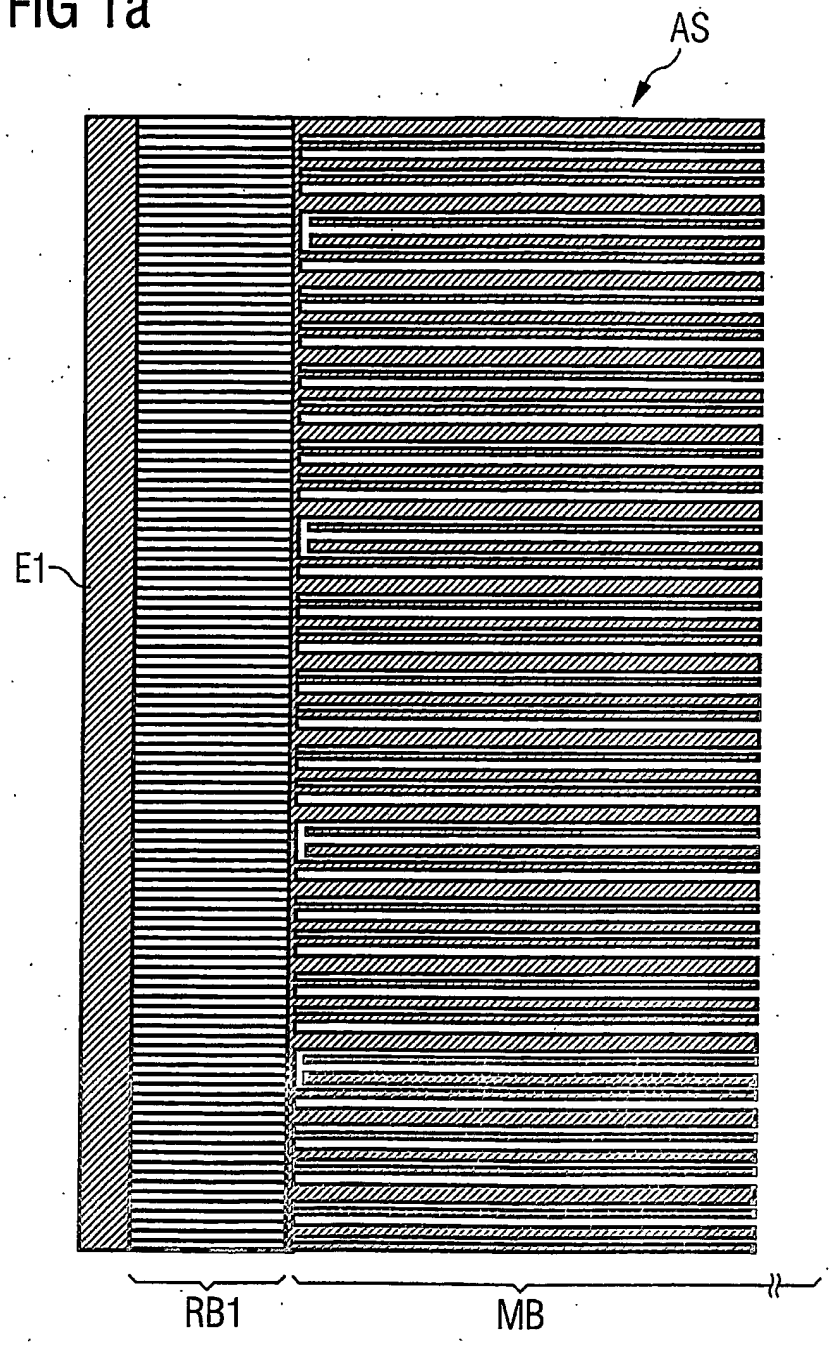


FIG 2

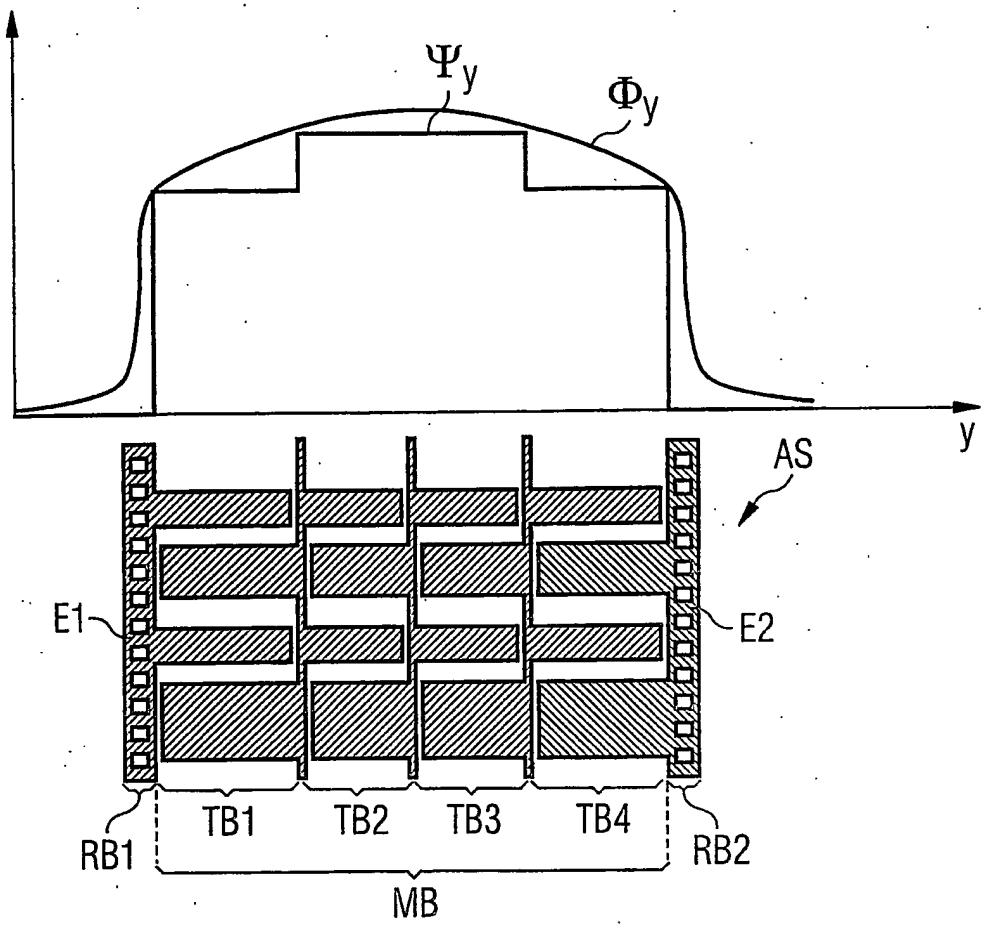


FIG 3

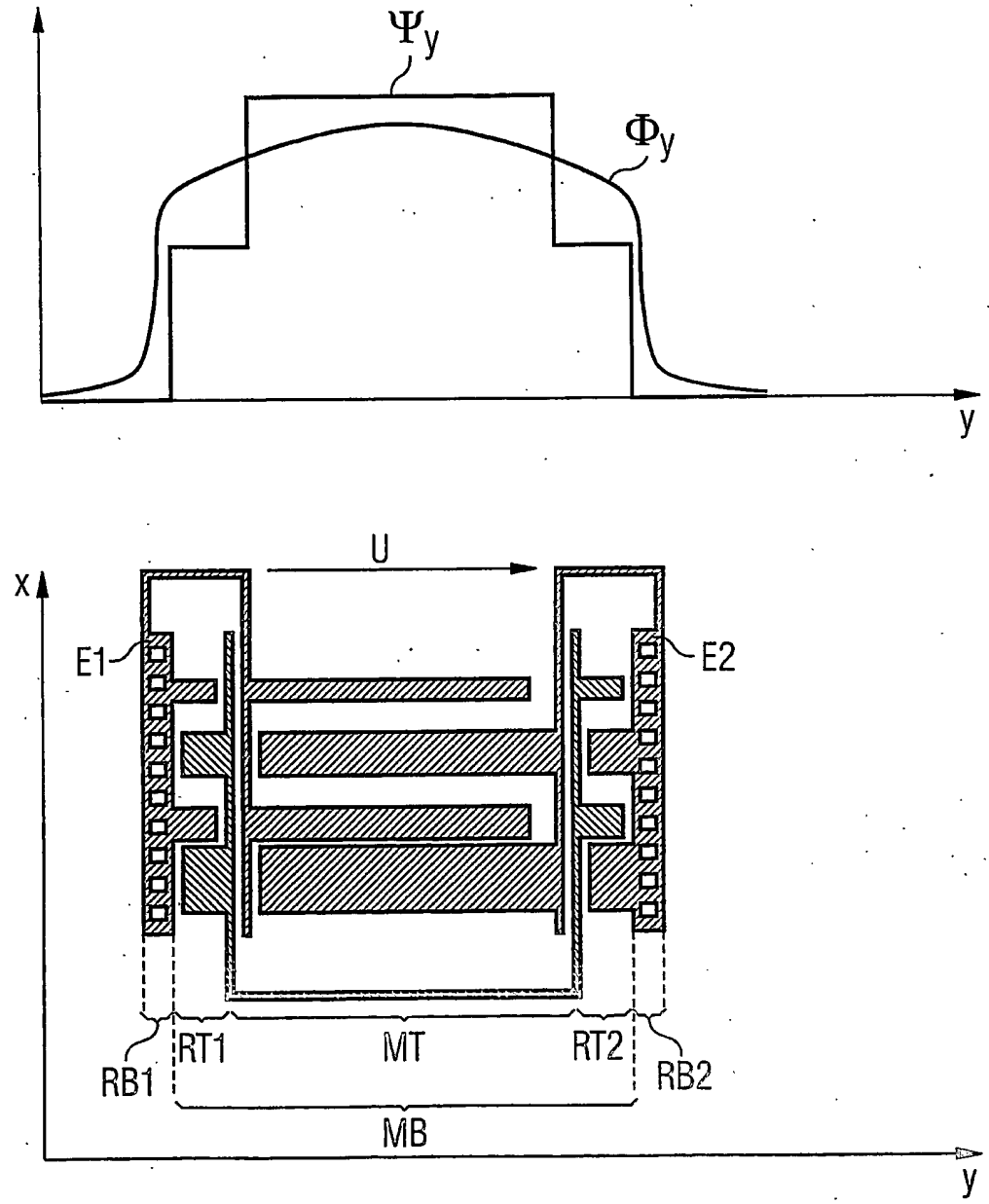


FIG 4

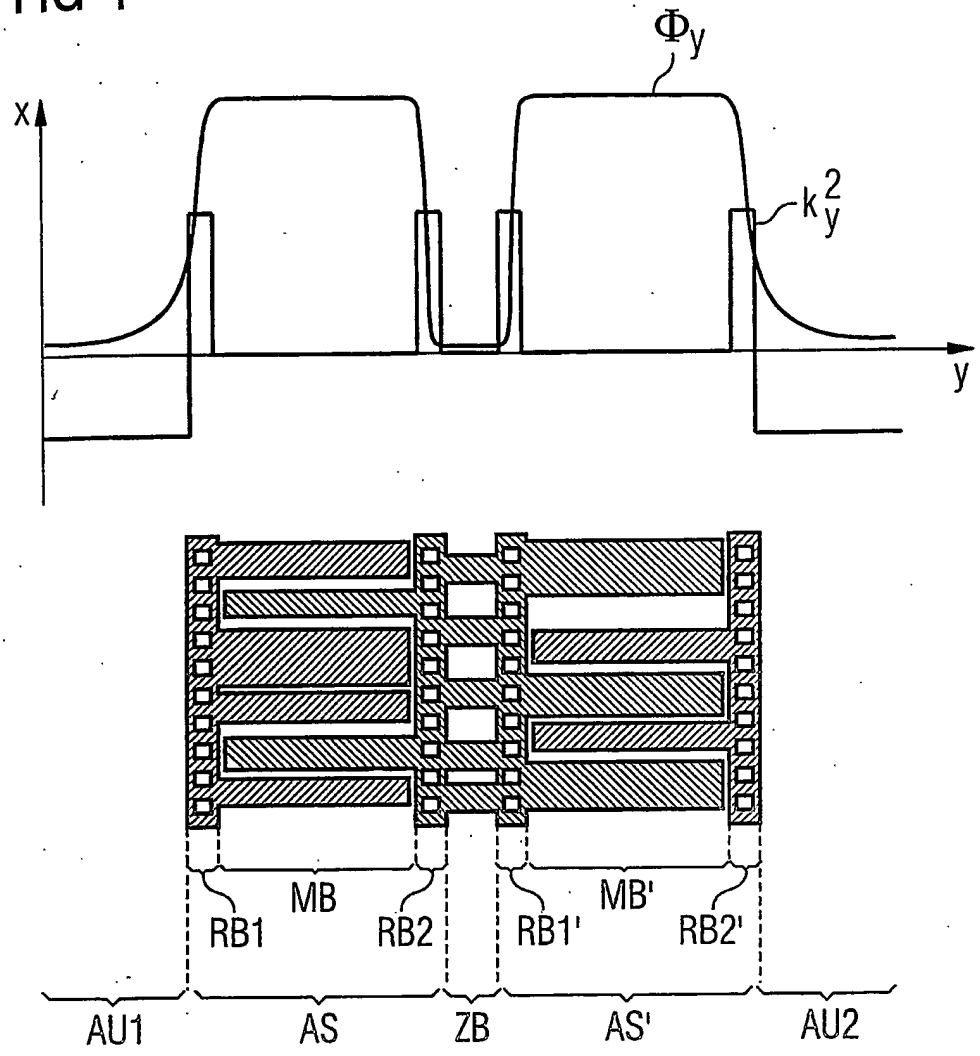


FIG 5

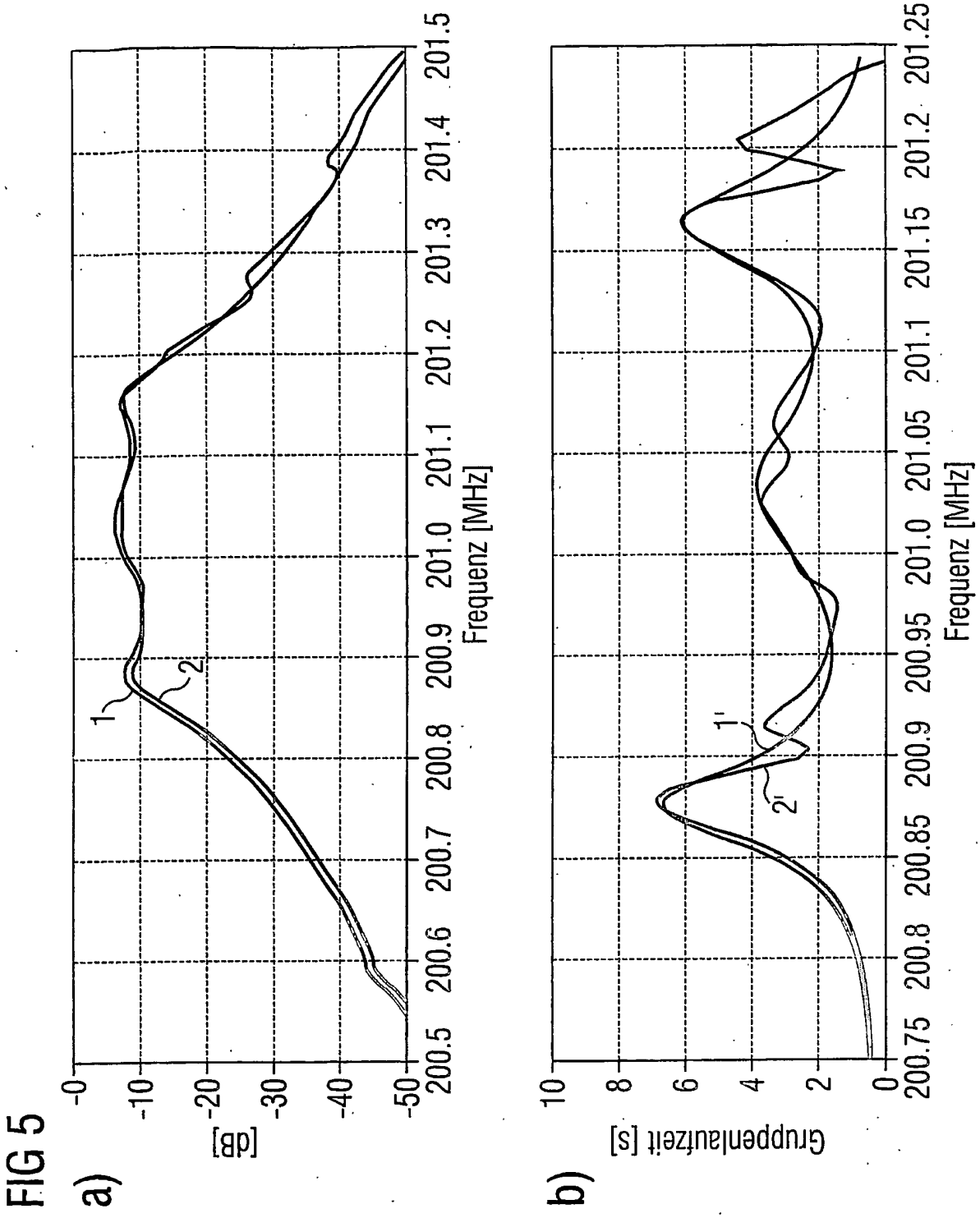

a)
[dB]
-0
-10
-20
-30
-40
-50
200.5
200.6
200.7
200.8
200.9
201.0
201.1
201.2
201.3
201.4
201.5
Frequenz [MHz]
1
2
b)
Gruppenlaufzeit [s]
10
8
6
4
2
0
200.75
200.8
200.85
200.9
200.95
201.0
201.05
201.1
201.15
201.2
201.25
Frequenz [MHz]
1'
2'

FIG 6

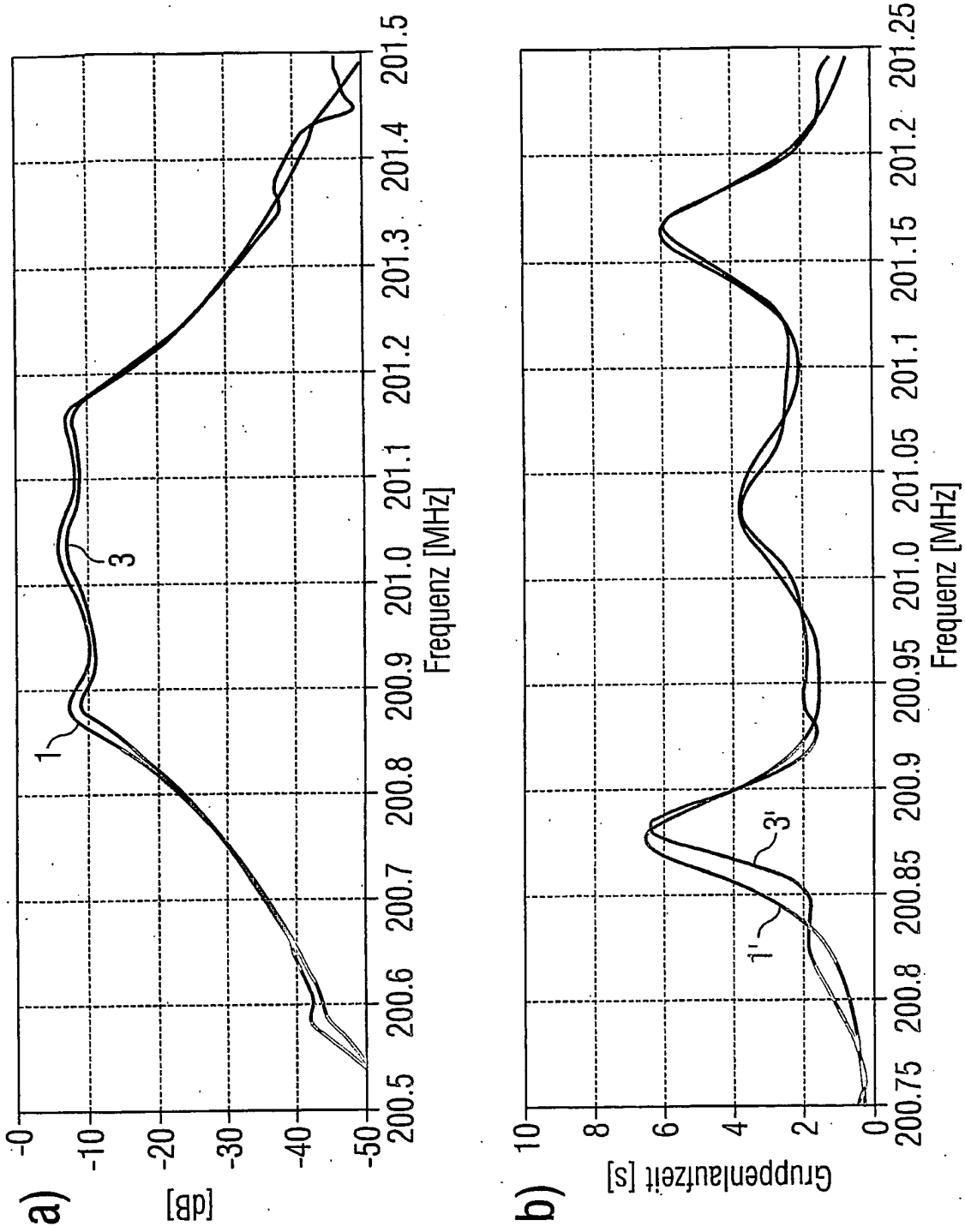

a)
[dB]
-0
-10
-20
-30
-40
-50
200.5
200.6
200.7
200.8
200.9
201.0
201.1
201.2
201.3
201.4
201.5
Frequenz [MHz]
1
3
b)
Gruppenlaufzeit [s]
0
2
4
6
8
10
200.75
200.8
200.85
200.9
200.95
201.0
201.05
201.1
201.15
201.2
201.25
Frequenz [MHz]
1'
3'

FIG 7

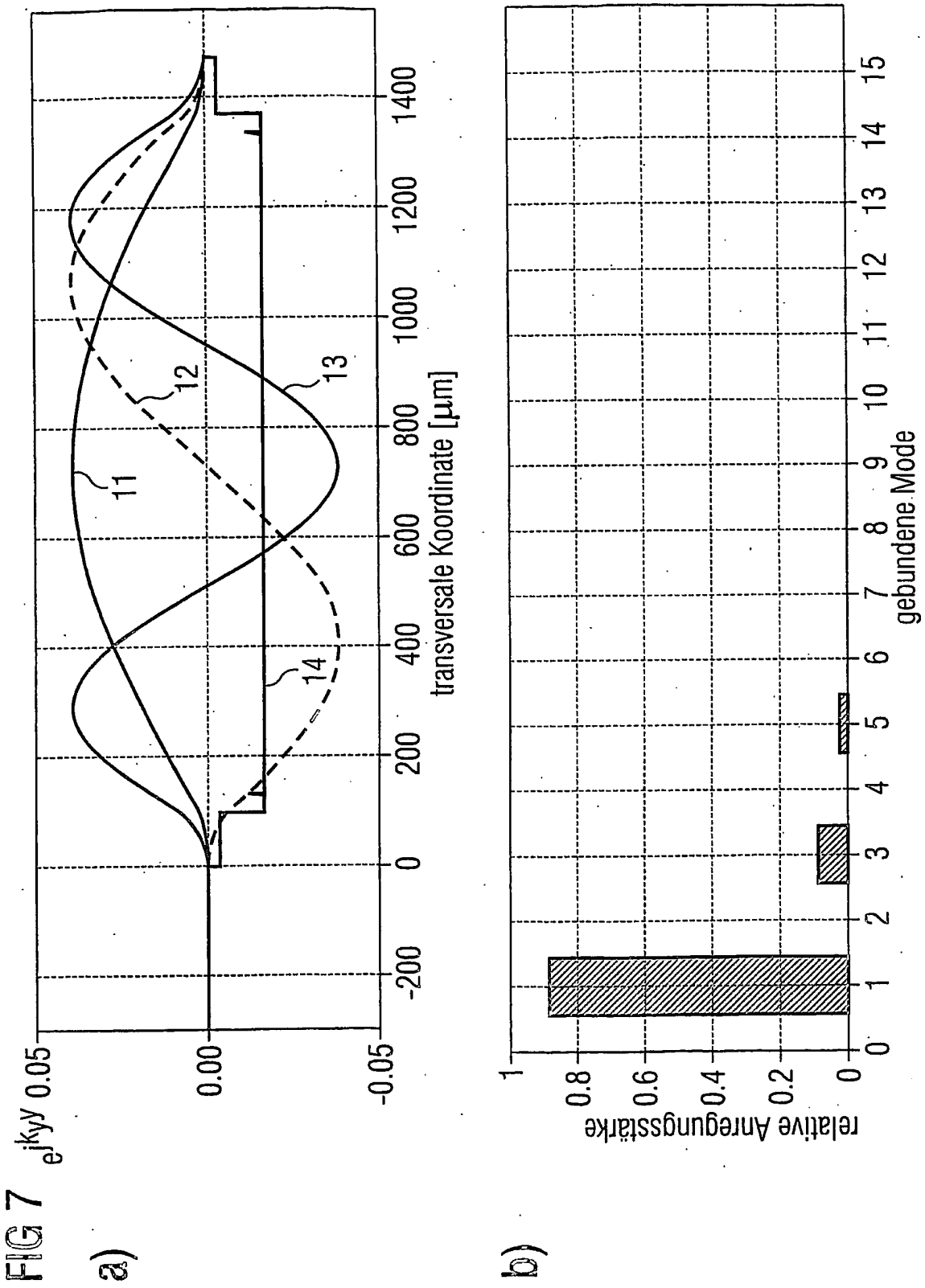
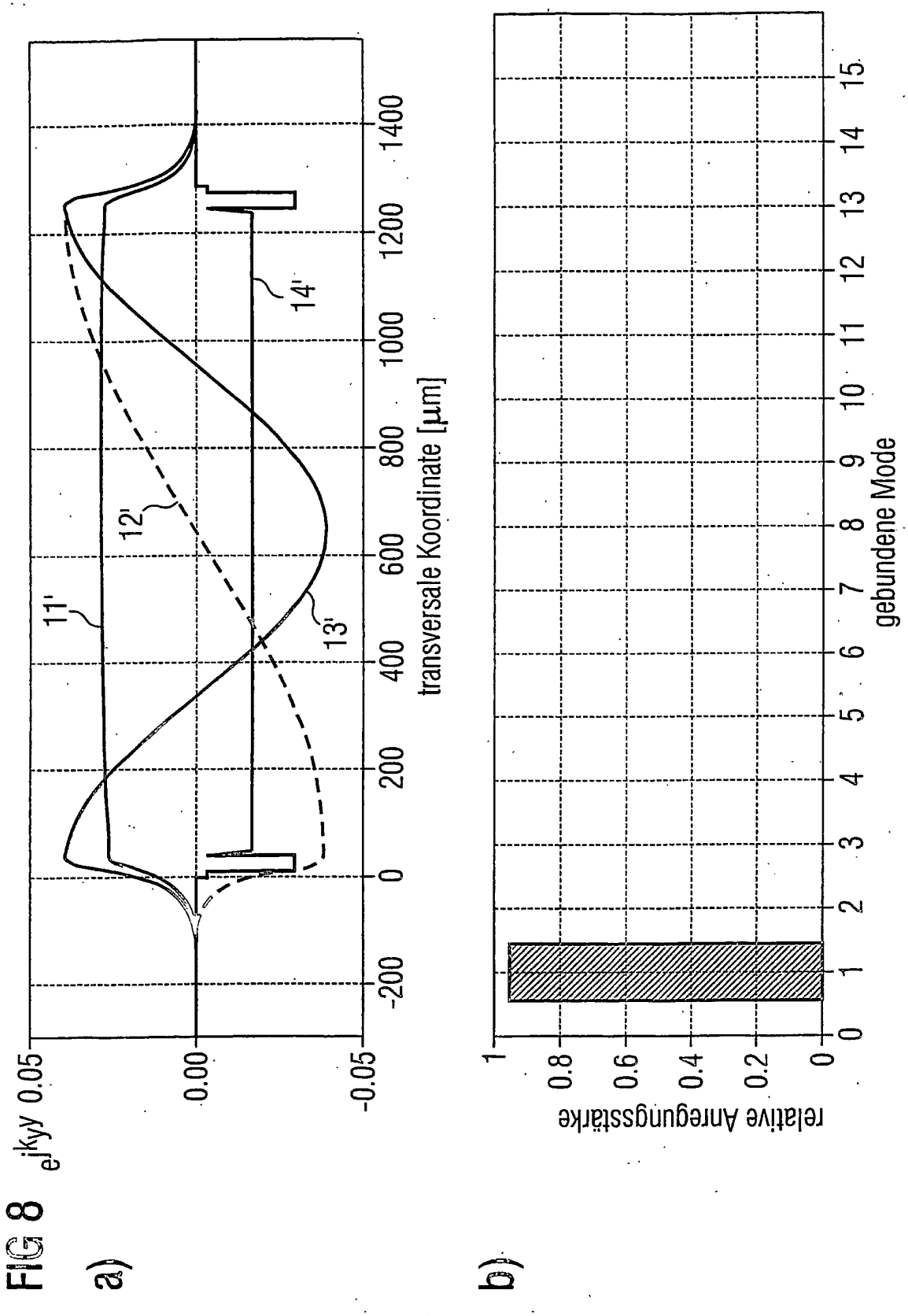

a)
$e^{jk_y y}$
0.05
0.00
-0.05
-200
0
200
400
600
800
1000
1200
1400
transversale Koordinate [µm]
11
12
13
14
b)
relative Anregungsstärke
0
0.2
0.4
0.6
0.8
1
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
gebundene Mode

FIG 8


a)
$e^{jk_y y}$
0.05
0.00
-0.05
-200
0
200
400
600
800
1000
1200
1400
transversale Koordinate [µm]
11'
12'
13'
14'
b)
relative Anregungsstärke
1
0.8
0.6
0.4
0.2
0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
gebundene Mode